ROHDE&SCHWARZ
Make ideas real

R&S®ZNB3000 VECTOR NETWORK ANALYZER

Maximizing measurement speed for filter characterization

Ideal for

Filter design	Filter tuning
Filter characterization	Filter production tests

Key specifications

Measurement speed	from 800 MHz to 1 GHz, at 500 kHz IFBW	1.3 ms for 201 points
Dynamic range	at 4 GHz, 10 Hz IFBW	typ. 150 dB
Trace noise	at 0 dBm, 10 kHz IFBW	typ. 0.0005 dB
Test port output	with R&S®ZNB30xx-B2x option	
	for R&S®ZNB3004	typ. –85 dBm, up to +13 dBm
	for R&S®ZNB3020	typ. –60 dBm, up to +18 dBm
Measurement bandwidth	base unit	1 Hz to 1 MHz
	with R&S®ZNB3-K17 option	1 Hz to 10 MHz

Fast forward to results

- The R&S®ZNB3000 vector network analyzer combines various benefits to optimize test speed and enhance measurement throughput
- Dedicated hardware features such as the DDS synthesizer, the enhanced dynamic range mode[1] and the best-in-class output power ensure a future-proof investment
- Further software features, including the segmented sweep, various marker functions and analysis tools, round off the perfect package for ultrafast measurements, e.g. for RF filter characterization

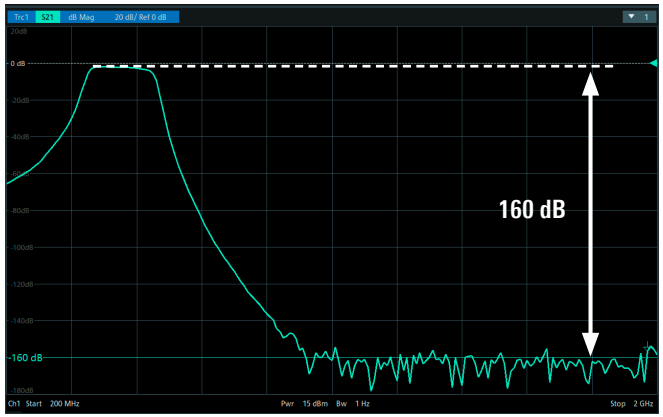
Features of the R&S®ZNB3000	Your benefits
DDS synthesizer for high speed measurements	▶ Extra fast frequency settings ▶ High phase repeatability and low phase noise
Enhanced dynamic range mode[1)]	▶ Highest dynamic range in its class ▶ Very high accuracy enables use of wider intermediate frequency bandwidth (IFBW) to maximize throughput ▶ Convenient characterization of challenging high-rejection filters
Excellent output power	▶ Optimized signal-to-noise ratio ▶ Compensation for setup losses from cabling, connectors and adapters

For options, prices and more information, visit
www.rohde-schwarz.com

[1] For 20 GHz and higher frequency models.

Highest dynamic range in its class

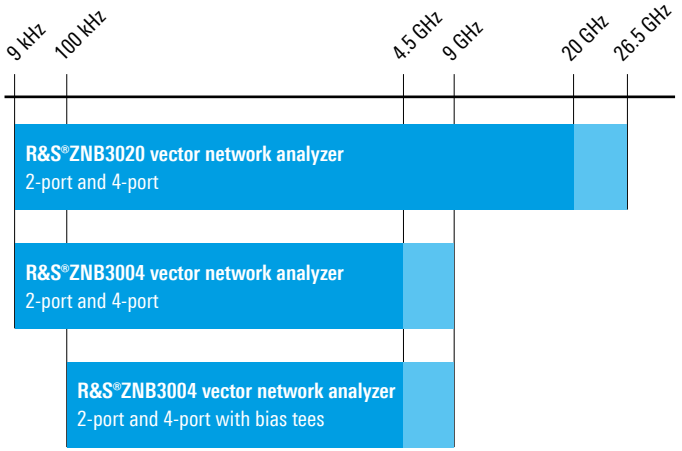
Enhanced dynamic range mode for convenient and fast filter characterization, even for high-rejection filters.



Need more ports? We've got you covered

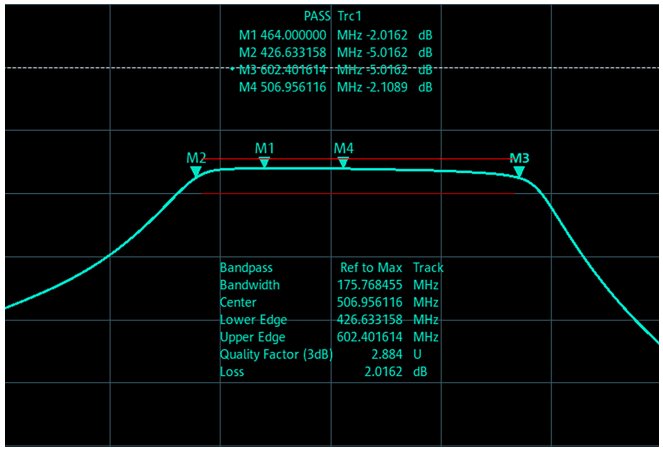
Native switch matrix support, with R&S®ZN-Z8x family enabling up to 48 ports for full-crossbar measurements and multi-site filter characterization in production.

R&S®ZNB3000 frequency upgrade concept for fast production ramp-up



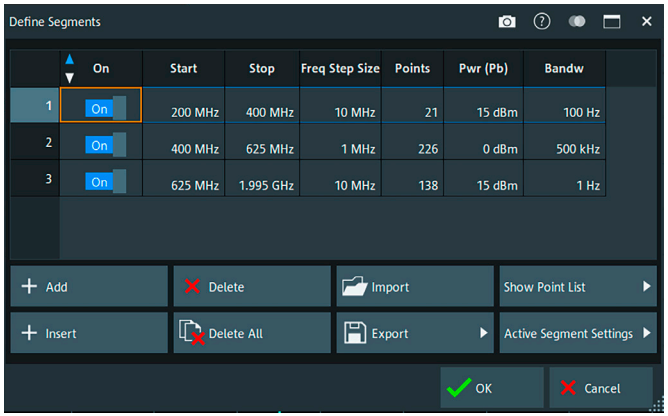
Marker functions and limit lines to characterize filter parameters

Versatile marker and analysis settings to display key performance parameters and immediately see effects of filter tuning. Limit lines and pass/fail analysis for convenient filter characterization.



Segmented sweep for optimized test configuration

Flexible configuration possibilities, e.g. IFBW, power levels and number of points, for optimal accuracy and speed during filter characterization.



Recommended instruments and options

Designation	Type
Base units	
Vector network analyzer, 2 or 4 ports, N, 9 kHz to 4.5 GHz	R&S®ZNB3004
Vector network analyzer, 2 or 4 ports, PC 3.5, 9 kHz to 20 GHz	R&S®ZNB3020
Options	
Frequency upgrade of 2-port R&S®ZNB3004 to 9 GHz	R&S®ZNB3-B082
Frequency upgrade of 4-port R&S®ZNB3004 to 9 GHz	R&S®ZNB3-B084
Frequency upgrade of 2-port R&S®ZNB3020 to 26.5 GHz	R&S®ZNB3-B262
Frequency upgrade of 2-port R&S®ZNB3020 to 26.5 GHz	R&S®ZNB3-B264
Extended dynamic range for 2-port R&S®ZNB3004	R&S®ZNB3-B52
Extended dynamic range for 4-port R&S®ZNB3004	R&S®ZNB3-B54
10 MHz receiver bandwidth	R&S®ZNB3-K17

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R&S®ZNB3000 vector network analyzer
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